

or a child with the proportions of a full-sized adult. All these distinctions therefore, instead of indicating diversity, are rather conclusive evidence of affinity, unless size itself is to be considered as a worthy ground of generic distinction.

After all a generic name is purely a matter of convenience, and for my part I think it more desirable and instructive to call the Liberian species *Hippopotamus*, and thereby to indicate its close relationship with the well-known large animal of that name, than to give it a designation in which this affinity is lost sight of. It may be sometimes expedient to divide up genera in which the number of species are excessive upon comparatively trivial characters; but in the case of *Hippopotamus*, with only two living and but few extinct species, no such reason can be alleged.

4. On a new Genus and Species of Australian Mugilidæ. By J. DOUGLAS-OGILBY, Department of Fishes, Austr. Mus. Sydney. (Communicated by F. DAY, C.I.E., F.Z.S.)

[Received November 1, 1887.]

TRACHYSTOMA, gen. nov.

Branchiostegals six; pseudobranchiæ present. No adipose eyelids. Vomer and palate furnished with distinct bands of villiform teeth; jaws toothless. Scales rather small, finely ctenoid.

TRACHYSTOMA MULTIDENS, sp. nov.

B. vi. D. $4\frac{1}{2}$. A. $3/9$. V. $1/5$. P. 15. C. 14.
L. lat. 48-51. L. tr. 16.

Length of head $5\frac{1}{3}$ to $5\frac{1}{2}$, of caudal fin $4\frac{2}{3}$ to $5\frac{1}{3}$, height of body $4\frac{2}{3}$ to 5 in the total length. *Eye* without adipose lids, the diameter of each $4\frac{1}{7}$ to $4\frac{1}{3}$ in the length of the head, $1\frac{1}{5}$ to $1\frac{1}{3}$ diameters from the end of the snout, and $1\frac{4}{5}$ diameters apart. Interorbital space convex; snout broad and depressed; upper lip not thickened. Angle made by the anterior edges of the mandibles moderately obtuse; the length of one of the mandibular rami is $\frac{2}{3}$, or slightly more, of the width of the gape of the mouth. The maxilla reaches backwards to the vertical from the hinder margin of the posterior nostril. Preorbital serrated along its outer edge. Nostrils nearer to the eye than to the end of the snout; the anterior nearly circular, small; the posterior oval, large, about five times the size of the anterior. The free space on the chin is of moderate size and lanceolate. *Teeth*: a patch of villiform teeth on the vomer, sometimes crescentic, sometimes biclivate; palate with an elongate band, broadest anteriorly. *Fins*: Spinous dorsal commences rather nearer to the base of the caudal than to the tip of the snout; its spines are strong, the first the longest, about two thirds of the length of the head; the interspace between the two dorsal fins is rather less than the base of the spinous dorsal, while the distance between the origins of the two dorsals exactly equals the length of the head,

anterior rays of second dorsal equal to the first spine. Anal commences considerably in advance of the second dorsal, and its rays are somewhat longer than those of that fin. Ventral fin about three fourths of the length of the head; pectoral rather more. Caudal forked, its lobes much longer than the head; the least depth of the free portion of the tail is half the length of the head. Scales 29 or 30 between the snout and the origin of the spinous dorsal; 6 to 8 in the interspace between the two dorsals. No pointed axillary scale. The pectoral fin reaches to the 13th or 14th scale of the lateral line. The first dorsal commences above the 19th scale of the lateral line, the second above the 32nd to 34th scale. Anterior rays of the soft dorsal and anal covered with small scales for fully half their height. An angular scale at the bases of the soft dorsal and ventral. Colours: silvery, the back greenish; cheeks tinged with gold; fins grey; irides yellow.

In the preparation of the above description I have examined three specimens of this fish picked out from a number of other Mulletts exposed for sale in the Sydney fish-market; all three came from Port Stephens, where they were taken in the brackish water at the mouth of the Keroah River, and are said to be distinguished from the two common Grey Mulletts (*Mugil dobula* and *M. peronii*) under the name of "River Mullet." These examples were obtained during the month of February, but though I have carefully overlooked all the consignments which have been sent to the market from that neighbourhood since, I have failed to meet with this species again: one of these, a female, had the roe almost ready for extrusion; in the two others, both males, the milt was about half developed; it is evident therefore that the autumn spawning takes place about the month of March with the main body of fish, and as all our other Mulletts spawn twice in the year, it is probable that this species also has a spring spawning-season. The specimens examined measured respectively 14, 15½, and 16¾ inches.

I may here mention that after an exhaustive examination of numerous examples of the two reputed species, *Mugil dobula*, Günth., and *M. grandis*, Casteln., I can find no differences sufficient to justify their separation. Castlenau's fish is the adult, which comes in from the open sea twice in the year, in spring and autumn, for the purpose of depositing its spawn about the mouths of our creeks and rivers, and is known to fishermen by the name of "Sea-Mullet." On their arrival from the sea they are in fine condition and very fat; and being very plentiful and of excellent flavour they command a ready sale in the market, and are eagerly sought for by the professional fishermen, to whom the mullet harvest here is analogous to the herring harvest in Scotland, or the pilchard harvest to a Cornish man. The shoals of mullets are usually followed by several large Sharks, among which *Carcharodon rondeletii*¹ and *Galeocерdo*

¹ The *Carcharias leucas* of Bennett (Proc. Zool. Soc. 1859, p. 223), doubtfully given by Dr. Günther as a synonym of his *C. brachyurus*, is *Carcharodon rondeletii*; the specimen is still preserved in the collection of the Australian Museum, and has been verified by the man who caught it.

rayneri are the most common species, which frequently make havoc of the nets, thereby causing serious loss to the fishermen, not only by the damage to the nets but also by the loss of all the enclosed fish, which quickly find the rents made by the Sharks and escape through them. I am of course speaking of seine-nets, which are the only kind in general use here. Günther's species is the half-grown fish, which does not go to the sea but remains in our bays and estuaries, and is therefore about a month earlier on the spawning-grounds, and consequently in the market, where it is called "Hard-gut Mullet." These fishes after spawning accompany the remnant of the older fishes to the sea, and return during the following equinox as "Sea-Mullet."

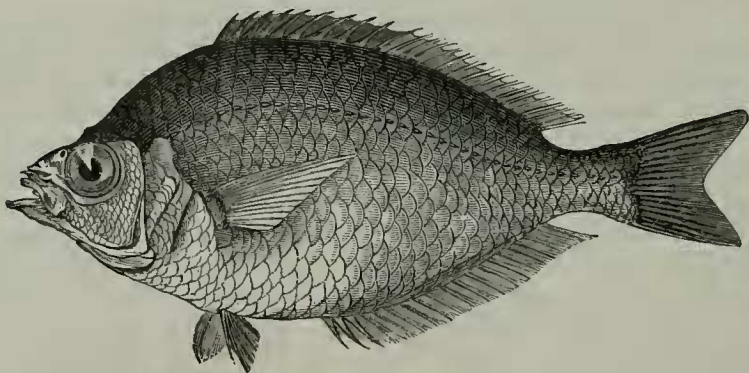
5. On a new Genus of Percidæ. By J. DOUGLAS-OGILBY.
(Communicated by F. DAY, C.I.E., F.Z.S.)

[Received November 7, 1887.]

CHTHAMALOPTERYX, gen. nov.

Branchiostegals six; pseudobranchiæ present. Body oblong-ovate, compressed. Mouth protractile. Preorbitals with a blunt bony protuberance in front; preopercles entire. A band of small teeth in the jaws. One dorsal fin very slightly notched, the length of the soft portion greater than that of the spinous, having the formula $\frac{9}{17}$; anal $\frac{3}{17}$; caudal forked. Scales of moderate size, cycloid, deciduous.

From the above diagnosis it is plain that this proposed genus is closely allied to *Gerres*; and it is in fact founded on a species which was described some years ago by Count Castelnau under the name of *Gerres melbournensis*, from specimens obtained probably in the



Chthamaloptyx melbournensis.

Melbourne fish-market. No other examples seem to have been noticed, at least none have been recorded that I am aware of, since his time, but during the last eighteen months the Australian Museum